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- (61) Related to Addition(s) : **38795/85**
- (71) Applicant(s)
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- (56) Prior Art Documents
GB 1376501
AU 547147 18519/83 E04H 3/28
- (57) Claim

1. A multi-purpose access kit as defined in claim 1 of Australian patent No. 577569 wherein each support rod is mounted on a base, a slot at the upper end into which a tool can be inserted for turning the leg, a nut on the deck plate to receive the support rod, the upper hollow post being threadedly positioned on the portion of the support rod extending above the deck plate, a swivel stud assembly at the upper end of the hollow post to be attached to a hand rail.

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COMPLETE SPECIFICATION

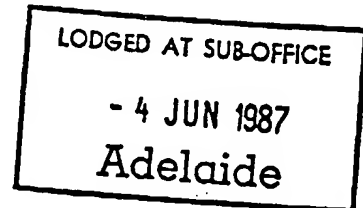
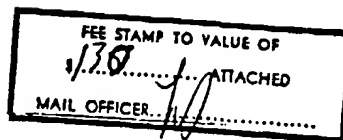
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Complete Specification for the invention entitled: "IMPROVED MULTI-PURPOSE ACCESS KIT"

The following statement is a full description of this invention, including the best method of performing it
known to ~~me~~ us:

This invention relates to an improved multi-purpose access kit, more particularly an assembly which has been described in Patent Application No. 38795/85.

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In that Patent Application there is described a multi-purpose access kit for providing access to a building, the kit comprising the assembly in combination of a plurality of elements including an adjustable support post to adjustably locate supporting rails thereon, deck plates, ramp plates or steps being supported by the rails, hand rails connected to the posts, connecting elements joining the rails at changes of angles in the vertical direction, and hand rail connecting elements. As described in that specification the support posts are of two portions, a threaded lower support rod swivelly mounted on a base, and an upper hollow post to be screwed over the support leg, and adjustable locking nuts on the support rod whereby the deck plates are positioned over the support rod onto the locking nuts, the hollow posts being screwed onto the deck plate to clamp into position to provide a landing.

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It is an object of this invention to provide an improvement in such a kit whereby the kit is more economical to produce and more simple to assemble.

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Thus according to the invention there is provided a multi-purpose access kit as defined in claim 1 of Australian patent No. 577569 wherein each support rod is mounted on a base, a slot at the upper end into which a tool can be inserted for turning the leg, a nut on the deck plate to receive the support rod, the upper hollow post being threadedly positioned on the portion of the support rod extending above the deck plate, a swivel stud assembly at the upper end of the hollow post to be attached to a hand rail.

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FIG. 3 is a view of the support rod and swivel base,

FIG. 4 is a perspective view of the deck plate.

FIG. 5 is a view of a step, and

FIG. 6 is a view of a termination wedge.

5. Referring to FIGS. 1 to 3, the support rod 1 is threaded throughout its length and at its bottom is provided with a swivel socket to a plate 2, the socket being formed by a ball end 3 on the end of the rod 1, this being surrounded by a "C" shaped surround 4 welded to the plate 2 to retain the ball end 3 within the so formed socket. At the upper end of the rod 1 there
10. is provided a slot 5 into which a tool such as a large screwdriver can be inserted to rotate the rod as later described.

The deck 6 has welded to its undersurface at the corners, nuts 7, which are adapted to receive the rods 1. Thus the deck 6 is placed over the upper end of the rods 1, and by rotating the rods the rods are threaded through the

15. nuts 7 and the deck is then positioned accurately for height.

The hollow posts 8 have welded thereto at their lower ends a threaded nut 9 so that the post can be then screwed down over the portion of the rod 1 extending above the deck 6.

- At the upper end of the post 8 there is provided a swivel stud 10
20. comprising a threaded stud 11 having a flange 12 and retained in the end of the post 8 by a hollow plug 13, the threaded stud 11 being freely rotatable in the plug 13. In order to rotate the stud 11 a nut 14 is threaded over the stud 11 and locked in position by a grub screw 15. In this way the hand rail or the like can be attached to the top end of the post 8 by turning the nut 14
25. and thus the stud 11 to screw this into a threaded aperture in the hand rail or the like.

FIG. 5 shows an alternative form of the step 16 which is used in the example shown in FIG. 1 of our earlier Patent Application and as further illustrated in FIGS. 5 and 6 of that application, the step being constructed

30. from sheet metal with the sides 20 being bent upwardly, the rear 21 bent upwardly and the nose 22 bent downwardly.

- FIG. 6 shows an alternative form of the termination wedge 17 this being formed of bent plate material with an aperture 18 so that it may be bolted to the adjacent bracket for smooth passage onto the deck. A recessed washer 19 being welded thereto so that the termination wedge may be
5. secured to the ground or floor.

The decks and the termination wedge instead of being bolted to each other as required may be provided with a stud on one of the members to engage in a key-hole slot in the other members so that they can be readily assembled together.

10. Although one form of the invention has been described in some detail it is to be realized that the invention is not to be limited thereto but can include various modifications falling within the spirit and scope of the invention.

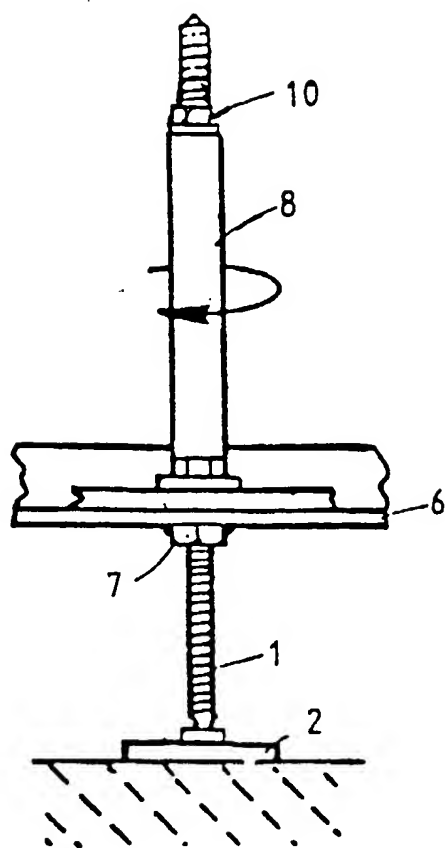
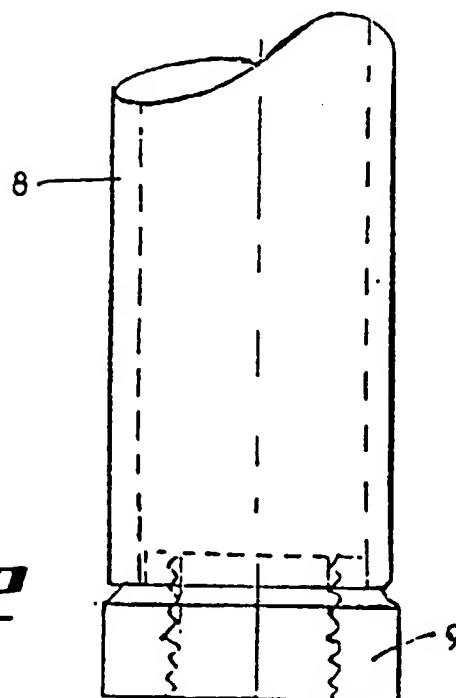
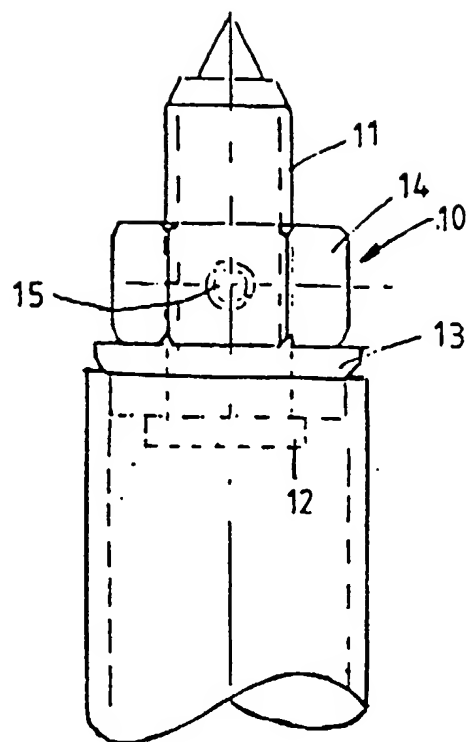
THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- 5 1. A multi-purpose access kit as defined in claim 1 of Australian patent No. 577569 wherein each support rod is mounted on a base, a slot at the upper end into which a tool can be inserted for turning the leg, a nut on the deck plate to receive the support rod, the upper hollow post being threadedly positioned on the portion of the support rod
10 extending above the deck plate, a swivel stud assembly at the upper end of the hollow post to be attached to a hand rail.
2. A multi-purpose access kit as defined in claim 1, wherein the hollow post has a nut welded thereto to be threadedly screwed on the
15 support rod.
3. A multi-purpose access kit as defined in claim 1, wherein each step is constructed from sheet metal, the sides and rear being upturned to form flanges, and the nose has a downturned flange.
20
4. A multi-purpose access kit as defined in claim 1 wherein the kit includes a ramp connected to the landing, the ramp comprising ramp side rails connected to the rails of the landing by connecting elements clamped between adjacent posts on the landing and ramp, and ramp
25 deck plates connected to said ramp side rails, said ramp being supported by support rods and posts extending at right angles to the ramp surface, the support rods extending at an angle from their respective bases, said ramp including a termination wedge joining said ramp to the ground, said termination wedge is formed of sheet metal
30 and has a sloping portion and a vertical portion, means for attaching the vertical portion to a further member of the kit, and means for attaching the wedge to the floor or ground.



5. A multi-purpose access kit substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

Dated this 6th day of July 1989
THE ADELADIE INNOVATION CENTRE-
TECHNOLOGY PARK ADELAIDE CORPORATION
10 By their Patent Attorneys
COLLISON & CO.

**FIG. 1****FIG. 2**

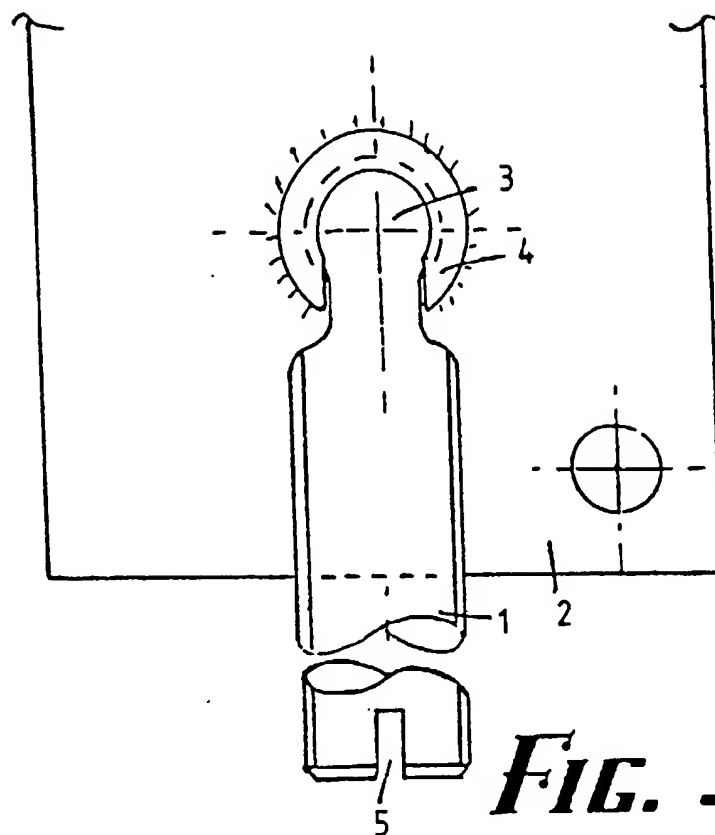


FIG. 3

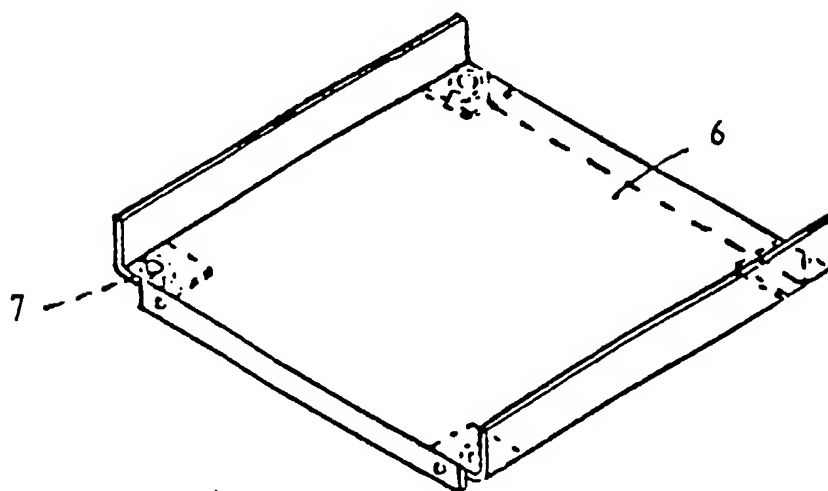


FIG. 4

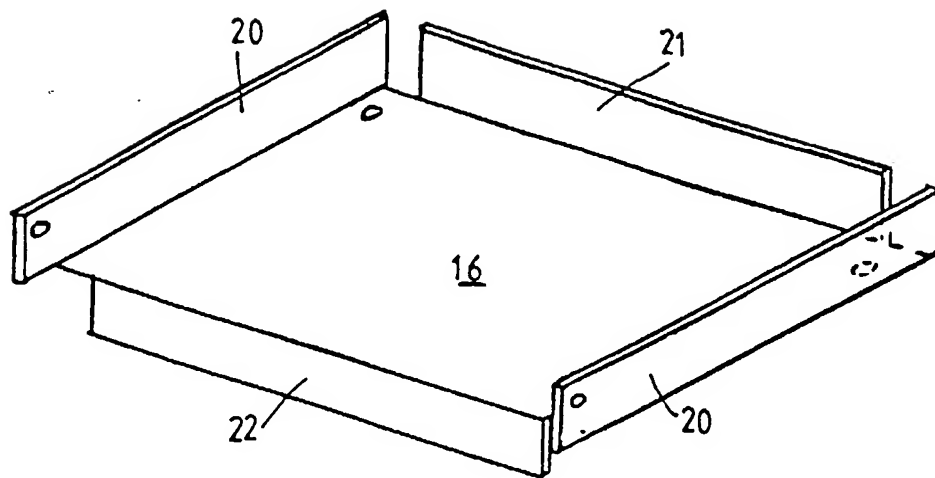


FIG. 5

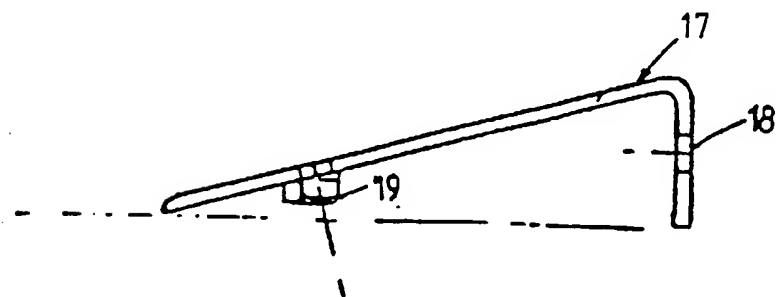


FIG. 6

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